

REMARKS

Reconsideration of this application, as amended, is respectfully requested. The following remarks are responsive to the Final Office Action of October 13, 2005.

Claims 1-3 and 5-34 are pending.

Claims 1-3, 5-8, 10-27, 29-31, 33, and 34 stand rejected under 35 USC §103(a) as being allegedly unpatentable over Fung (US 5,396,635) in view of Thomas (US 6,216,235).

Claims 9, 28, and 32 stand rejected under 35 USC §103(a) as being allegedly unpatentable over Fung (US 5,396,635) in view of Thomas (US 6,216,235), and further in view of Hawkins (EP 0,708,398).

Changes in the Claims:

Claims 1, 7, 20, 24, 27, 30 have been amended in this application to further particularly point out and distinctly claim subject matter regarded as the invention. No new matter has been added. The amendments are supported by the present specification at paragraph [0019]: "...Further, after the processor transitions to the actual maximum performance state 306, then predefined periods of time inhibiting transition to actual maximum performance state 306 occur such as thermal gaps 320..."

Rejection under 35 USC §103(a) – claims 1-3, 5-8, 10-27, 29-31, 33, and 34

Claims 1-3, 5-8, 10-27, 29-31, 33, and 34 stand rejected under 35 USC §103(a) as being allegedly unpatentable over Fung in view of Thomas. This rejection is respectfully traversed.

Under MPEP §706.02(j), in order to establish a prima facie case of obviousness required for a §103 rejection, three basic criteria must be met: (1) there must be some suggestion or motivation either in the references or knowledge generally available to modify the reference or combine reference teachings (MPEP §2143.01), (2) a reasonable expectation of success (MPEP §2143.02), and (3) the prior art must teach or suggest all the claim limitations (MPEP §2143.03). See In re Royka, 490 F. 2d 981, 180 USPQ 580 (CCPA 1974).

Applicant respectfully submits that the proposed combination of Fung and Thomas do not teach or suggest the all of the claim limitations of claims 1-3, 5-8, 10-27, 29-31, 33, and 34.

Fung describes a computer power management system in which an activity monitor monitors the activity of the computer system including storing call values for call functions and preset activity threshold values for the various states of operation (e.g., on, doze, sleep, and off). An algorithm is employed in the form of power management software to compare the accumulated call values to the preset activity threshold values to determine whether to remain in an active mode or be switched to a conservation mode. In other words, an algorithm cooperating with preset threshold values determine whether to switch from a higher performance state to a lower performance state and vice versa. However, Fung does **not** teach operating the integrated circuit at the third state of performance for a period of time followed by **a predefined period of time** wherein the integrated circuit operates at the second state of performance upon the user initiated event.

Thomas describes control of a processor's clock frequency and/or a fan's speed so as to provide thermal and/or power management for the computing device based on active feedback from a temperature sensor (See temp. sensor 4 and temp. signal 6, Figs. 1, 3, 4, 5, 7, 9, and 10). In particular, "when prolonged activity (i.e. sustained fast clock frequency) causes the processor's temperature to become dangerously high for proper operation, the clock frequency is reduced so as to maintain processing speed at a reduced speed while preventing overheating." See Col. 3, lines 26-30. "By decreasing the clock frequency in relation to the chip temperature, processing speed can be maximized for a given temperature without risking processor overheating." See Col. 3, lines 11-14.

Contrary to the proposed combination of Fung and Thomas, Claim 1 recites the limitation of operating the integrated circuit at the third state of performance for a period of time followed by **a predefined period of time** where the integrated circuit operates at the second state of performance based upon the detection of the user initiated event. The period of time the circuit in Thomas operates in a higher mode (i.e., faster clock rate) relies upon a complex system to actively monitor a temperature sensor during circuit operation. "As the chip temperature increases beyond some threshold temperature... the

frequency of the clock signal 10 will gradually decrease.” See Col. 4, lines 8-11. Thus, the period of time the clock rate is limited **varies** according to the real-time temperature of the chip, ambient temperature, activity level, etc. Thomas is silent as to any predefined amount of time wherein the integrated circuit operates at the second state of performance based upon the detection of the user initiated event.

Furthermore, FIG. 1 in Thomas illustrates **various states of performance** as the temperature of the chip increases. Thomas does **not** teach or suggest distinct states of performance (first, second, and third) in which “for a predefined period of time the integrated circuit operates at **the second state of performance** based upon the detection of the user initiated event.”

Neither Fung nor Thomas suggest a “operating the integrated circuit at the third state of performance for a period of time followed by **predefined amount of time** where the integrated circuit operates at the **second state of performance** based upon the detection of the user initiated event.” For similar reasons as those described for claim 1 above, Fung and Thomas do not teach or suggest the limitations in independent claims 7, 20, 24, and 30.

Therefore, the independent claims 1, 7, 20, 24, and 30 are not obvious according to Fung in view of Thomas under § 103 and are thus patentable over the cited art.

As a dependent claim is deemed to include the limitations of a claim from which it depends, the arguments presented above also address the rejections against the dependent claims rejected here under § 103. Accordingly, the rejections against the dependent claims 2-3, 5-6, 8, 10-19, 21-23, 25-27, 29, and 31 have been addressed, and withdrawal of these rejections is respectfully requested.

Rejection under 35 USC §103(a) – claims 9, 28 and 32

Claims 9, 28, and 32 stand rejected under 35 USC §103(a) as being allegedly unpatentable over Fung (US 5,396,635) in view of Thomas (US 6,216,235), and further in view of Hawkins (EP 0,708,398). This rejection is respectfully traversed.

Adding the teachings of Hawkins to Fung and Thomas, alone or in combination, fails to render the present independent claims 1, 7, 20, 24, and 30 obvious. Hawkins discusses an integrated processor fabricated on a single monolithic circuit that employs

circuitry to accommodate data-intensive, view-intensive and voice-intensive application functions by using a power management unit (PMU) interconnected to a clock control unit having multiple phase-locked loops for programmably clocking various clocked circuits according to an operational state of the PMU. However, Hawkins, alone or in combination with Fung and Thomas, does not discuss the limitation of operating an integrated circuit at a third state of performance for a period of time followed by predefined amount of time where the integrated circuit operates at the second state of performance based upon the detection of the user initiated event. Therefore, as discussed above, independent claims 1, 7, 20, 24, and 30 are not obvious in view of Hawkins, Fung and Thomas.

As a dependent claim is deemed to include the limitations of a claim from which it depends, the arguments presented above also address the rejections against the dependent claims rejected here under § 103. Accordingly, the rejections against the dependent claims 9, 28 and 32 have been addressed, and withdrawal of these rejections is respectfully requested.

Applicant therefore submits that the rejection based the Hawkins, Fung and Thomas references is improper and should be withdrawn. Thus, Applicant submits that claims 9, 28, and 32 recite novel subject matter which distinguishes over any possible combination of Hawkins, Fung and Thomas.

Conclusion

For all of the above reasons, applicants submit that the amended claims are now in proper form, and that the amended claims all define patentable subject matter over the prior art. Therefore, Applicants submit that this application is now in condition for allowance.

Request for allowance

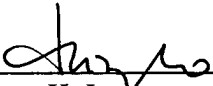
It is believed that this Amendment places the above-identified patent application into condition for allowance. Early favorable consideration of this Amendment is earnestly solicited. If, in the opinion of the Examiner, an interview would expedite the prosecution of this application, the Examiner is invited to call the undersigned attorney at the number indicated below.

If there are any additional charges, please charge them to our Deposit Account No. 02-2666. Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Date: 1/11/2006



Thierry K. Lo
Reg. No. 49,097

12400 Wilshire Blvd.
Seventh Floor
Los Angeles, CA 90025-1026
(408) 720-8300